Military .								
CH2M HILL ENG	INEERING	CHAN	NGE NO	TICE		1a. ECN 72	25736 R 0	
Page 1 of 9	,	DM	⊠ FM	TM		1b. Proj. E C	N/A -	- R
2. Simple Modification Yes No	3. Design Inpurequired for Sim		r full ECNs, record information on the ECN-1 For difications)			on the ECN-1 F	orm (not	4. Date July 31, 2008
5. Originator's Name, Organization	on, MSIN, & Phor	e No.	6. PrHA N	umber	7. U	SQ Number		8. Related ECNs
John Elsen, Columbia Energy 8 Services (CEES), B8-12, 946-7			□ N/A M			TF - 08 - 1252 1405 m.h.	6 □ N/A	N/A
9. Title 240-S-302 Pumping System Ch Address Use Of The Polar Tank		10.	D. Bldg. / Facility No. 11. Equipment / Component ID N/A N/A			omponent ID	12. Approval Designator N/A	
13. Engineering Documents/Dray	wings to be Chan	ged (In	cl. Sheet & R	ev. Nos.)	14.	Safety Designa	ition	15. Expedited/Off-Shift
H-14-107514 Sheet 1, Rev. 0 (s					□ s	c □ss ⊠	GS N/A	ECN?
16a. Work Package Number	16b. Modification	n Work	Completed	16c. I	Restor	ed to Original	Status (TM)	17. Fabrication Support ECN?
CLO-WO-07-0962 CLO-WO-07-0963		o Engine	r / Data			N/A	Data	☐ Yes ☐ No
18. Description of the Change (U	Responsib			۹)	Res	sponsible Engineer /	nate	
will require pneumatic assistance and requires alternate hose conhoses already fabricated and telephones fab	nnections. Adap ested. released design out the use of th	ter ass	emblies are	to be fab	ricated	d to support the	e use of the i	240-S-302 pumping system alternate hose connections
Prior to the use of the originally 241-AP-106 a radiological hotsit was determined that an altern used in place of the Walker tankload/unload tanker and has diffeconnectors and adapters will be unloading. Additionally, the Polar tanker wigravity drain from the bottom of	planned Walker spot was identificate transport tanker, in the 240-Serent style hose was used to supportill be off-loaded	tanker ed durin nker wo -302 p connec t hose using p	for transpong baseline buld be used umping systems than the and breathe	Traing the pradiological. The Poterm. The me Walker er filter ins	ning Ir umpe al sun lar tar Polar tanke tallatio	mpact Yes and 240-S-302 levey. Due to the and the control of the control and t	No iquids to ne hot-spot, will be coose ding and	20. ECN Category Direct Revision Supplemental Void/Cancel ECN Type Supersedure Revision
21. Distribution								Release Stamp
Name	MSIN	Name				MSIN	A APA CAMPANA	Paralle of Engl
DG Baide	S7-24	SM O	'Toole			S7-90	ADJUKA	5.200 AUG 25 2008
RB Calmus	S7-75	SD Do	oss			S7-03		and the second
EO Thorne	R3-26	МН Ві	rown			S7-03	DATE:	(HANFORD
JJ Elsen	B8-12	65 G	auck			57-24.	STA	RELEASE) ID.
MA Fish	S7-24						D	La Ro
SD Kozlowski	R2-58						15.00 E. S.	V~ V6
TL Faust	S5-07							

CHZW HILL EN	GINEERING	CHA	CE						
Page 2 of 9		DM	☐ FM	□ тм	1b. Proj. EC	N N	1/A -	- R	
22. Revisions Planned (Includ None	e a brief description	of the c	ontents of each	revision)					
Note: All revisions shall have the	approvals of the aff	ected o	rganizations as	identified in blo	ck 12 "Approval	Design	ator," on pa	ge 1 of this F	ECN.
23. Commercial Grade Item Dedesign change) None				24. Engineering Data Transmittal Numbers (associated with this design change, e.g., new drawings, new documents) None					
25. Other Non Engineering (no	ot in HDCS) docum	ents th	at need to be m	odified due to	this change	-			<u> </u>
Type of Document	Document Numbe			Update Comp		Respo	nsible Engi	neer (print/si	ign and date)
Alarm Response Procedure	N/A			N/A		N/A			+
Operations Procedure	N/A			N/A		N/A			
Maintenance Procedure	N/A			N/A		N/A			
N/A	N/A			N/A		N/A			
·									
			· · · · · · · · · · · · · · · · · · ·						
26. Field Change Notice(s) Us	-40	NOTE	E: ECNs are rec	uired to record	and approve all	2	7 Design	Verification	Poguirod?
Yes No If Yes, Record Information on the attach form(s), include a descrip resolution on ECN Page 1, block permanent changes.	e ECN-2 Form, tion of the interim	FCNs origin into th chang includ	issued. If the Fall design mediane design mediage the original detection the necessary all design media	CNs have not of then they are judy via an ECN. If esign media the rengineering characteristics.	changed the ust incorporated the FCN did en the ECN will	If p	Yes X	No ninimum atta st from TFC-l	ch the one
28. Approvals								-	_
Facility/Project S	Signatures M. H. Brown f	3.	Date		A/E Si	gnature	S		Date
Resp. Engineer SM O'Toole	mur B		8-5-08	Originator/De	sign Agent	J Elsen	Jalu ?	Isen	7/31/08
Resp. Manager DG Baide	Il Bairle		J-25-08	Professional B	Engineer		V		
0 11 1				Project Engine	eer				
IS&H Engineer			**************************************	Quality Assur					
NS&L Engineer				Safety	\$1.00 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A				
Environ. Engineer		. 0		Designer					
Engineering Checker MA Fish	W. A. J	ish	8/5/08	Environ. Engi	neer	-			
Other TR FARRIS	Eguck Pot.		9/25/08	Other	***************************************				
Other	0	\$1-1-\$000 A BOOK \$1000 A		Other					
Other					T OF ENERGY	/ OFFI	CE OF BIVE		TION
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***				ADDITIONAL	CICNATURES				***************************************
Other				ADDITIONAL	SIGNATURES				
Other									
Other									1

1a. ECN 725736 R 0

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1b. Proj. ECN N/A -

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Block 13 continued:

H-14-107514 Sheet 2, Rev. 0 H-14-107515 Sheet 1, Rev. 0

Block 18 continued:

SUPPORTING ANALYSIS: The Polar tanker is compliant and certified for the transportation of Type A/LSA-II radioactive waste. The use of the Polar tanker is still governed by Hanford Site Shipping and Receiving. The new Polar Tank Adapter Assembly (H-14-107514-080) supports the use of the existing S-302 hose assemblies that have been built and tested, for filling the Polar tanker with either pumped liquid from S-302 or a secondary non-contaminated assembly for flush water. The new Tanker Air Hose Assembly (H-14-107514-090) will be used to connect the existing Air Pressure Control Manifold (H-14-105394) to the Polar tanker for pneumatic assisted off-load. The new Water Control Skid Adapter Assembly (H-14-107514-100) is to be used to connect the existing Tanker Water Hose Assembly (H-14-107514-070) to the existing Water Control Skid (H-14-105395), planned for use at the DST off load location. An alternate breather filter assembly design is necessary to support the installation of a Flanders 40 CFM radial filter onto the dry disconnect fitting currently installed on the Polar tanker.

H-14-107514 Sheet 1; Add item -080 Polar Tanker Adapter Assembly and -090 Tanker Air Hose Assembly and -100 Water Control Skid Adapter Assembly, update general notes 8 and 11 to support pressure testing of new items, add labeling note 12, update parts list to reflect additional item; changes as shown on page 5.

H-14-107514 Sheet 2; Add details for items -080 Polar Tanker Adapter Assembly and -090 Tanker Air Hose Assembly and -100 Water Control Skid Adapter Assembly , add dust plug item 42 to end of Off Loading Hose Assembly; changes as shown on page 7.

H-14-107515 Sheet 1; Add Polar Tanker Breather Filter Assembly item 2, and associated parts to drawing; changes as shown on page 9.

Note: An AutoCAD page may be used in place of this form (the header section items must be included on the AutoCAD page).

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1b. Proj. ECN N/A

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Document/Drawing No. H-14-107514 Sheet 1 Revision 0

WAS:

$\underline{\mathsf{GENERAL}\ \ \mathsf{NOTES:}}\ (\mathsf{UNLESS}\ \ \mathsf{OTHERWISE}\ \ \mathsf{SPECIFIED})$

- ALL DIMENSIONS ARE IN INCHES. FABRICATION TOLERANCES AS SHOWN.
 BREAK ALL SHARP EDGES AND REMOVE ALL BURRS.
 SEAL PIPE THIREADS ON HOSES WITH LOCTITE 567 PST WITH ACTIVATOR 7649 PER MFG DIRECTIONS.
- 4. ALL HOSE END CONNECTIONS SHALL BE CRIMPED OR SWAGED AND INSTALLED PER MANUFACTURERS SPECIFICATIONS.
- PER MANUFACTURERS SPECIFICATIONS.

 HOSE LENDTH TOLERANCE IS ±2'.

 HOSE ASSEMBLY TIRUS 25, 28, AND 35 TO BE HYDROSTATICALLY TESTED BY MANUFACTURERS IN ACCORDANCE WITH RUBBER MANUFACTURERS ASSOCIATION. DESIGN PRESSURE FOR HOSE ASSEMBLIES IS 250 PSIG. PERFORM HYDROSTATIO PRESSURE TIST TO 500 PSIG 1-10/—0 PER RUH—P—2. MAINTAIN PRESSURE FOR 5 MINUTES WHILE INSPECTING FOR LEAKS, FITTING SUIPPAGE, OR WEARNESS OF HOSE STRUCTURE.
- OR WEAVIESS OF HOSE STRUCTURE.

 7. FOLLOWING FABRICATION OF WATER AND DISCHARGE HOSE ASSEMBLES PERFORM HYDROSTATIC PRESSURE TEST OF ALL HOSE ASSEMBLES TO 35 PSIG +10/-0 PSIG PER ASME B31.3. MAINTAIN PRESSURE FOR 10 MINUTES AND VERBY NO LEARAGE FROM BID CONNECTIONS AND HOSE. COMPLETELY DRAIN ALL HOSE ASSEMBLES FOLLOWING TESTING.

 8. FOLLOWING FABRICATION OF AIR HOSE ASSEMBLES, PERFORM PNEUMATIC PRESSURE TEST ON EACH ASSEMBLES, PERFORM PNEUMATIC PRESSURE TEST ON EACH ASSEMBLY 10 1875 PSIG \$4/-0 PSIG PER ASME THE ASSEMBLY DATE WITH SECRET FOR A SIGNED THE ASSEMBLY DATE WITH SECRET FOR THE MAINTENANCE TO MAINTENANCE TO THE ASSEMBLY DATE WITH SECRETED FIELD AIR COMPRESSOR UNIT AND SUPPLIED SPARE QUICK DISCONNECT FLUG.



- COMPRESSOR UNIT AND SUPPLIED SPARE QUICK DISCONNECT PLUG.

 10. HASS ASSEMILY TIMES 4.1 TO BE HYDROSTAINCALLY TESTED SYSPOLATION,

 10. HASS ASSEMILY THEM 5.4. TO BE HYDROSTAINCALLY TESTED SYSPOLATION,

 10. BESIND RESSURE FOR HOSE ASSEMILY IS TO PISIC, PERFORM HYDROSTATION,

 10. BESIND RESSURE FOR HOSE ASSEMILY IS TO PISIC, PERFORM HYDROSTATION,

 10. PERFORM HYDROSTATION FOR LEAKS, FITTING SUPPLAGE, OR

 11. FOLLOWING PARICATION OF POFILODING HOSE ASSEMBLY ((TEM 8) PERFORM

 11. FOLLOWING PARICATION OF POFILODING HOSE ASSEMBLY ((TEM 8) PERFORM

 11. FOLLOWING PARICATION OF POFILODING HOSE ASSEMBLY ((TEM 8) PERFORM

 11. FOLLOWING PARICATION OF HOSE ASSEMBLY ((TEM 8) PERFORM

 12. FOLLOWING PARICATION OF HOSE ASSEMBLY FOLLOWING

 13. FOLLOWING PROSSURE FOR 10. MINUTES AND VERTY FOLLOWING FROM END

 15. FOLLOWING FOR METHOD HYDROSTAIN HOSE ASSEMBLY FOLLOWING

 15. FOLLOWING

OTY REGO						PARTS / SASK HAMPER HOMOSCLATURE (DESCRIPTION		MATERIAL/REPERENCE	SHEET	FEA NO	
-020	-060	-050	-040	-030	-020	-910	PARIS / WASH HUNDLE		MITTING THE FOREIGN	sec.	140
1								CONCENTRIC REDUCER, 2" FNPT X 1" FNPT, SST	ASTM A182	2	44
1							200-F-SS	ADAPTER, MALE, 2" X 2" MNPT	DIXON	2	45
1		Г					200-DC-SS	DUST CAP	DIXON	2	41
					1		N458DU-EZNI	PRESSURE REDUCING VALVE 1" FNPT X 1" FNPT, 25-75 PSI	WATTS	1	47
					1		B-16-HRN-12	HEX REDUCING NIPPLE, 1" MINPT X 3/4" MINPT	SWAGELOK	1	48
					1		B6-KP31	QUICK DISCONNECT, MALE, 3/4" FNPT	HANSEN	1	45
					1		P-PDC-6-HK	DUST CAP (6-HK)	HANSEN	1	50
						1	P-SDC-6-HK	DUST PLUG, 3/4" (6-HK)	HANSEN	1	5

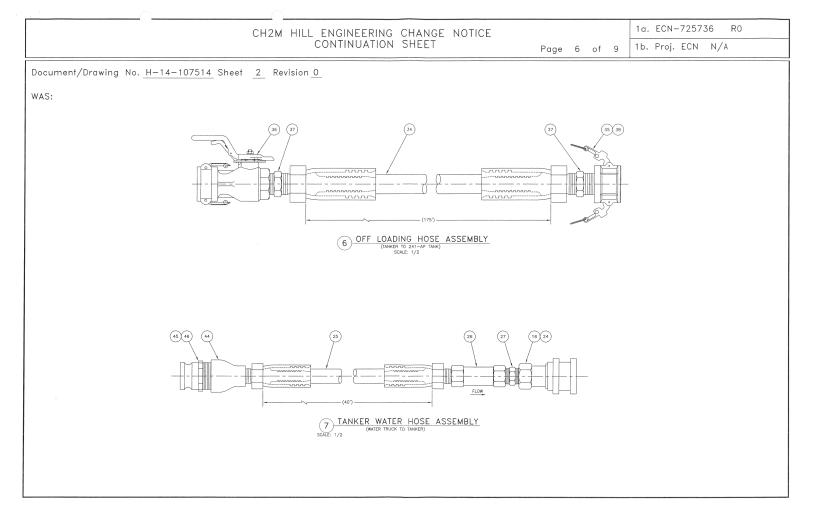
			-				PARTS LIS	T/MATERIAL LIST			_
		arv	PECOD.	T-100	-020		PARTS / DASH NUMBER	MOMENCIATURE/DESCRIPTION	WATERIAL/REPORDICE	SHEET	TEN
-370	-060	-980	-040	-030	-oue	T.	-010	FLUSH WATER HOSE ASSEMBLY (FLUSH MANIFOLD TO PUMP RISER BOX		3	1
				1	\vee		-020	PUMP FLUSH HOSE ASSEMBLY (WATER TRUCK TO FLUSH MANIFOLD)		1	2
_	\vdash	+	+-		r	\vdash	-030	AIR HOSE ASSEMBLY		1	3
_	\vdash	-	V	r	+		-040	(COMPRESSOR TO FLUSH MANIFOLD) DISCHARGE HOSE ASSEMBLY (PUMP RISER BOX TO VALVE MANIFOLD)		2	4
_	-		P	╁	-	-	-050	(PUMP RISER BOX TO VALVE MANIFOLD) DISCHARGE HOSE ASSEMBLY (VALVE MANIFOLD TO TANKER)		2	5
-	\-	P	-			-		(VALVE MANIFOLD TO TANKER)		-	1
7	M	-	-	-	-	-	-060	OFF LOADING HOSE ASSEMBLY (TANKER TO 241-AP TANK)		2	6
$^{\times}$	_	-	-	⊢	-	-	-070	TANKER WATER HOSE ASSEMBLY (WATER TRUCK TO TANKER)		2	7
	_	-	<u> </u>	_	<u> </u>	_				_	8
		_	_	_	_	L				_	9
											10
											11
		L	L								12
											13
											14
			1				ML8-KP36	QUICK DISCONNECT, MALE, 1" FNPT	HANSEN	2	15
		2	1				SS-16-HN	HEX NIPPLE, 1" MNPT	SWAGELOK	2	16
	-		-	-	1	1	100-DP-SS	DUST PLUG	DIXON	1,2	17
,	-	2	,		Ė	Ė	ML8-HP36	QUICK DISCONNECT, FEMALE, 1" FNPT	HANSEN	2	18
÷	-	-	H	,			MI 4-HP26	QUICK DISCONNECT, FEMALE, 1/2" FNPT	HANSEN	1	19
-	-	-	-	1	H	-	P-SDC-4-HK	1/2" FNPT DUST PLUG, 1/2" (4-HK)	HANSEN	1	20
-	_	-	-	<u> '</u>	Н			DUST CAP, 1" (8-HK)	HANSEN	-	-
_		-	1	_	Н	_	P-PDC-8-HK	BALL WALVE, FULL PORT, 1" FNPT	FLOWTEK	2	21
		2	1	_			71053RRL			2	22
						1	ML6-HP31	QUICK DISCONNECT, FEMALE, 3/4" FNPT	HANSEN	1	23
1		2	1				P-SDC-8-HK	DUST PLUG, 1" (8-HK)	HANSEN	2	24
AR		AR	AR		AR			GOODYEAR 1" HORIZON, 300 W/ 1" MNPT ENDS	GOODYEAR	1,2	25
1							SS-16C4-1	CHECK VALVE, 1" FNPT	SWAGELOK	2	26
1							SS-16-HN	HEX NIPPLE, 1" WNPT	SWAGELOK	2	27
						AR		GDODYEAR 3/4" HORIZON, 300 W/ 3/4" MNPT ENDS	GOODYEAR	1	28
						1	SS-16-RB-12	REDUCING BUSHING, 1" MNPT X 3/4" FNPT	SWAGELOK	1	29
-	-				,	,	RD100RI	COUPLER, FEMALE 1° FNPT, BOSS-LOCK	DIXON	1,2	30
+	-	-	-		Ĥ	-		pvaa-Lucik		H	31
-	-		Н	1	-	-	B4-HP26	QUICK DISCONNECT,	HANSEN	2	32
\dashv	-		-	+	\vdash	-		FEMALE, 1/2" FNPT ADAPTER, MALE, QUICK DISCONNECT	HANSEN	1.2	33
-	-		-	-		-			GOODYFAR		
-	AR		_	_		_		GOODYEAR 1 1/2" HORIZON, 200 W/ 1 1/2" MNPT ENDS COUPLER, FEMALE 2" FNPT,	DIXON	2	34
	1					-		COUPLER, FEMALE 2" FNPT, BOSS-LOCK DRY COUPLING, 2" FNPT, SST	(PT COUPLING)	2	35
4	1						(MU20U)			2	36
	2							REDUCING BUSHING, 2" MNPT X 1 1/2" FNPT, SST	ASTN A182	2	37
	1						200=01=35	DUST PLUG	DIXON	2	38
T				AR				GOODYEAR 1/2" HORIZON, 300 W/ 1/2" MNPT ENDS	GOODYEAR	1,2	39
											40
											41
7				-							42
+	-	-									43
										_	

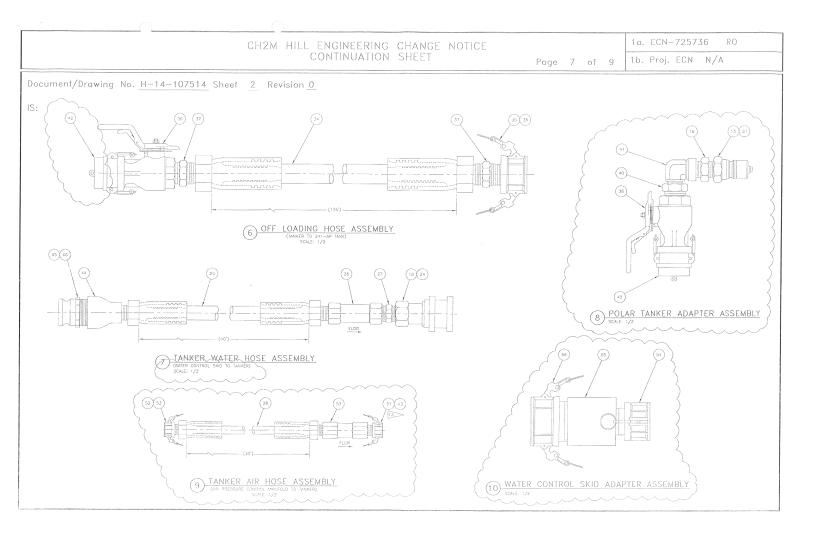
CONTINUATION SHEET 1b. Proj. ECN N/A Page 5 of 9 Document/Drawing No. H-14-107514 Sheet 1 Revision 0 PARTS LIST/MATERIAL LIST PARTS LIST/MATERIAL LIST IS: CONCENSE AND 2 TO THE CONCENSE OF THE CONCENS OF T ADDITICA, MAE, 2" x 2" MAFT DOWN MUST CAP, 2" DOWN MUST CAP, 2" DOWN MUST CAP, 2" DOWN DOWN DOWN MATT M GENERAL NOTES: (UNLESS OTHERWISE SPECIFIED) ALL DIMENSIONS ARE IN INCHES. FABRICATION TOLERANCES AS SHOWN. BREAK ALL SHARP EDGES AND REMOVE ALL BURRS. SEAL PIPE THREADS ON HOSES WITH LOCTITE 567 PST WITH ACTIVATOR 7649 PER MFG DIRECTIONS. ALL HOSE END CONNECTIONS SHALL BE CRIMPED OR SWAGED AND INSTALLED PER MANUFACTURERS SPECIFICATIONS. HOSE LENGTH TOLERANCE IS $\pm 2'$. COUPLER, FEMALE, 2" MNPT, GOSS-LOCK REDUCER, 3" FNPT X 2" FNPT COUPLER, FEMALE, 3" MNPT HOSE ASSUMENT CLASS S. 28. AND US TO BE INFORGATICALLY TESTED BY MANUFACTURED IN ACCORDANCE WITH RUBBERT MANUFACTURED ASSOCIATION, DESIGN PRESSURE FOR A DOSE ASSEMBLES IS 200. ACCORDANCE AND ACCORDANCE ASSUME TO A DOSE ASSEMBLES IS 200. ACCORDANCE AND ACCORDANC 2 54 FOLLOWING TABLECTION OF WATER AND DISCHARGE HOSE ASSEMBLES TO 375 PERFORM HORDOSTATIC PRESSURE TEST OF ALL HOSE ASSEMBLES TO 375 PER SAME SAIS, AMMATIAN PRESSURE FOR OMNOTIONAL AND VERBY HOLLEANDE FROM END CONVECTIONS AND HOSE. COMPLETELY DIMENTIFICATION OF ASSEMBLES ASSEMBLES FOR THE ASSEMBLES FOR HEX NIPPLE, 1" MINPT FOLLOWING FARRCATION OF AIR HOSE ASSEMBLES (ITEM 3 AND 9), PERFORM PREJUNITE TEST ON EACH ASSEMBLY TO 1875 PSIG -57-0 PSIG PER ASSEMBLY 3. MAINTAIN PERSONE FOR 10 MINUTES AND VERIFY NO LEAKAGE FROM THREADED CONNECTIONS. 'NSTALL APPROPRIATE CONNECTION TO MATE WITH SELECTED FIELD AIR COMPRESSOR UNIT AND SUPPLIED SPARE QUICK DISCONNECT PLUG. COMPRESSOR UNIT AND SUPPLIED SPARE DUCK DISCONNECT FLUC. HOSE ASSEMBLY ITEMS 24, TO BE PURPOSTATIONALLY TESTED BY MANUFACTURER IN ACCORDANCE WITH KURBER MANUFACTURERS ASSOCIATION. DESIGN PRESSURE FOR HOSE ASSEMBLY IS 130 PIOS. PERFORM HYDROSTATIC PRESSURE TEST TO 300 PRIC +10/-0 PIR RNA-HP-2. MANUFAL PRESSURE APPLICATED TO 10/-0 PRIC HIND SUPPLIED PRICE STREET SUPPLIED STREET PRICE STREET FOLLOWING FRERECTION OF OFFICIANCY ONSE ASSEMBLY (TEX 10). POLAR ASSEMBLY (TEX 10) PROFINE HYDROSTATIC PRESSURE TEST TO 225 PSIG ASSEMBLY (TEX 10) PROFINE HYDROSTATIC PRESSURE TOX 10 MUNIES AND VERNY 10 LEMAGE FROM END CONNECTIONS AND HOSE. COMPLETELY ORAN HUSE ASSEMBLY TOLLOWING TESTED TO AND HOSE. SCHOPLETELY ORAN HUSE ASSEMBLY TOLLOWING TESTED TO AND HOSE. 2 22 HEX NIPPLE, 1" MAPT NET NETE, 1" NOT SANGED NO GOODWAY SERVICE NETE NOT SANGED NO GOODWAY SERVICE NOT SANGED NO GOODWAY SERVICE NOT SANGED NO SANGED NOT LABEL_DETABL CONVENTS: POLAR TANKER CONNECTION END TEXT TYPE: BLOCK MATERIAL: PHERBLIC TEXT COLORS: GUACK LETTERING ON WHATE BACKGROUND TEXT SIZE: 3716* HIGH CHARACTERS

CH2M HILL ENGINEERING CHANGE NOTICE

1a. ECN-725736

R0200BL (M0200)





1a. ECN-725736 R0

Page 8 of 9 1b. Proj. ECN N/A

WAS:

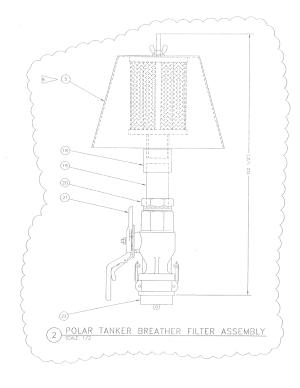
	PAR	TS LIST/MATERIAL	LI21		
TY REQD	PARTS / DASH NUMBER	NOMENCLATURE/DESCRIPTION	MATERIAL/REFERENCE	SHEET	NO
X	-010	TANKER INLET/BREATHER ASSEMBLY		1	1
					2
					3
			-		4
1	0-007-1-12-RF-NU- 00-E3-Z04059	BREATHER FILTER, 40 CFM, WITH WEATHER COVER	FLANDERS	1	5
1	P-PDC-8-HK	DUST CAP, 1" (4-HK)	HANSEN	1	6
1	71053 RRL	VALVE, BALL, 1" FNPT, FULL PORT SST, 7000 SERIES	FLOWTEK	1	7
1	ML8-KP36	CONNECTION, PLUG, SST	HANSEN	1	8
1	SS-16-HN	HEX NIPPLE, 1" NPT, SST	SWAGELOK	1	9
1	SS-16-SE	STREET ELBOW, 1" NPT, SST	SWAGELOK	1	10
1		PIPE, 1" X 6" SCH 40, SST, SEAMLESS	ASTM A312/A376	1	11
1		BLIND FLANGE, 4" 150#, SST, RF	ASTM A182	1	12
AR		NIPPLE, 1 1/2" SCH 40, 14", SEAMLESS	SST	1	13
8		FLAT WASHER, 5/8	SST	1	14
1		4" FLANGE GASKET, 1/8" THK	GARLOCK BLUE 3000	1	15
8		BOLT, HEX HEAD, 5/8-11UNC-2A 3 1/2" LONG	ASTM A193 GR 8	1	16
8		NUT, HEX HEAD, 5/8-11UNC-2B	ASTM A194 GR B8	1	17
1		COUPLING, 1 1/2" FNPT #150	SST	1	18

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1a. ECN-725736 RO

1b. Proj. ECN N/A

Document/Drawing No. H-14-107515 Sheet 1 Revision 0

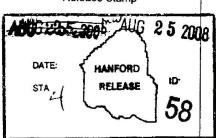


		PAR	RTS LIST/MATERIAL	LIST		
GTv	RE00	PARTS / DASH NUMBER	NOMENCLATURE/DESCRIPTION	MATERIAL/REFERENCE	SHEET	ITE NI
	X	-010	IANKER INLET/BREATHER ASSEMBLY		1	
X		-020	POLAR TANKER BREATHER FILTER ASSEMBLY		1	12
	7					:
	1					-
1	1	0-007-1-12-RF-MD- 00-E3-Z04059/T0622997	BREATHER FILTER, 40 CFM, WITH WEATHER COVER	FLANDERS	1	
	1	P-PDC-8-AK	DUST CAP, 1" (4-HK)	HANSEN	1	,
	1	71053 RRL	VALVE, BALL, 1" FNPT, FULL PORT SST, 7000 SERIES	FLOWTEK	1	
	1	MLB-KP36	CONNECTION, PLUG, SST	HANSEN	1	8
	1	SS-16-HN	HEX NIPPLE, 1" NPT, SST	SWAGELOK	1	9
	1	SS-16-SE	STREET ELBOW, I" NPT, SST	SWAGELOK	1.	1
	1		PIPE, 1" X 6" SCH 40, SST, SEAMLESS	ASTM A312/A376	1	1
	1		BLIND FLANGE, 4" 150#, SST, RF	ASTM A182	1	
	AR		NIPPLE, 1 1/2" SCH 40, 14", SEAMLESS	SST	1.	1
	8		FLAT WASHER, 5/8	SST	1	1
	1		4" FLANGE GASKET, 1/8" THK	GARLOCK BLUE 3000	1	1
	8		BOLT, HEX HEAD, 5/8-11UNC-2A 3 1/2" LONG	ASTM A193 GR 8	1	1
	8		NUT, HEX HEAD, 5/8-11UNC-2B	ASTM A194 GR B8	1	1
1	1		COUPLING, 1 1/2" FNPT	ASTM A182 OR A351 OR F304	1	11
1			PIPE NIPPLE, 1 1/2" SCH 40, 4", SEAMLESS, SST	ASTM A312/A376 OR A733	1	15
1			HEX REDUCER, 2" MNPT X 1 1/2" FNPT, SST	ASTM A182 OR A351 OR F304	1	21
1		(MD20D)	DRY COUPLING, 2" FNPT, SST, VITON	(PT COUPLING)	1	2
1		250-DP-SS	DUST PLUG, 2 1/2"	DIXON	1	22

· S								
CH2M HILL ENG	INEERING CI	IAH	NGE NOTIC	CE		1a. ECN 725736 R 0		
Page 1 of 9	_ D	M	⊠ FM ☐ TM 1b. Proj. ECN N/A			1b. Proj. ECN N/A -	- R	
2. Simple Modification Yes No	The state of the s							
5. Originator's Name, Organization	on, MSIN, & Phone I	No.	6. PrHA Numb	oer	7. U	SQ Number	8. Related ECNs	
John Elsen, Columbia Energy 8 Services (CEES), B8-12, 946-7			No. 00080 R - 0	N/A	No.	F-08-1232-DR-D 1405 M.H.B. DNA	N/A	
			L			19-19-1		
Stite 240-S-302 Pumping System Ch Address Use Of The Polar Tank	10.	0. Bldg. / Facility No. N/A		11. Equipment / Component ID N/A		12. Approval Designator N/A		
13. Engineering Documents/Drav	15. Expedited/Off-Shift							
H-14-107514 Sheet 1, Rev. 0 (s	see page 3 for cont	inua	ition)	·	□ s	SS GS N/A	ECN?	
16a. Work Package Number	16b. Modification \	Nork		16c.	Restor	17. Fabrication Support		
CLO-WO-07-0962 CLO-WO-07-0963	KSHUL K/1	M	SEP 18 2008 Maliglag 18 5143 NA			ECN?		
<u> </u>	Responsible E							
18. Description of the Change (U	se ECN Continuation	n pag	ges as needed)					
PROBLEM STATEMENT: An alternate transport tanker is necessary to support the transfer of pumped liquid from catch tank 240-S-302 located in the 200 West Area, to the 241-AP-106 DST located in the 200 East Area. The 5000 gallon Walker tanker was originally planned to support this operation. Due to a radiological hot-spot identified during the performance of base line surveying the Walker tanker is not to be utilized. The 5000 gallon Polar Tanker (H-9-203) will be utilized. The Polar tanker is a top load/unload tanker and will require pneumatic assistance for the DST off-load. Additionally, the Polar tanker has different hose connections than the Walker and requires alternate hose connections. Adapter assemblies are to be fabricated to support the use of the 240-S-302 pumping system hoses already fabricated and tested.								
DEFINED SOLUTION: Update on the Polar tanker and to suppr 105395) at the 241-AP off load I	ort the use of the e	edia xisti	i as shown with ng Air Pressure	in this Contr	ECN to Mai	o support changes for the nifold (H-14-105394) and V	alternate hose connections Vater Control Skid (H-14-	
See page 3 for continuation.								
19. Justification of the Change (U	se ECN Continuation	n pag	es as needed)	Eng	ineerin	g Rework 🗌 Yes 🛛 No	20. ECN Category	

See page 3 to continuation	I.,				
19. Justification of the Chan	ge (Use ECN Contin	uation pages as needed)	Engineering Rework Training Impact Ye		20. ECN Category
Prior to the use of the origing 241-AP-106 a radiological lit was determined that an aused in place of the Walker load/unload tanker and has connectors and adapters wunloading. Additionally, the Polar tanker gravity drain from the bottom	not-spot was identitemate transport to tanker, in the 240 different style hos ill be used to supper will be off-loade	ified during baseline radi tanker would be used. T -S-302 pumping system. se connectors than the Woort hose and breather fill d using pneumatic assist	the pumped 240-S-302 ological survey. Due to the Polar tanker (H-9-203 The Polar tanker is a to falker tanker. Alternate ter installations during lo	t liquids to the hot-spot, B) will be op hose ading and	☐ Direct Revision ☐ Supplemental ☐ Void/Cancel ECN Type ☐ Supersedure ☐ Revision
21. Distribution					Release Stamp
Name	MSIN	Name	MSIN	1	residuoe otamp

21. Distribution		-	
Name	MSIN	Name	MSIN
DG Baide	S7-24	SM O'Toole	S7-90
RB Calmus	S7-75	SD Doss	\$7-03
EO Thorne	R3-26	MH Brown	\$7-03
JJ Elsen	B8-12	65 Ganck	57-24
MA Fish	S7-24		
SD Kozlowski	R2-58		
TL Faust	\$5-07		



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e approvals of the at ledication Numbers	ffected or (associa	ganizations as	24. Engine change, e.	eering Data Tran	smittal Numbers	s (associated with this design	
			None				
ot in HDCS) docum	ents tha	t need to be	modified due	to this change			
Document Number	er		Update Co	mpleted On	Responsible E	ngineer (print/sign and date	
N/A			N/A		N/A		
N/A			N/A		N/A	**************************************	
N/A			N/A		N/A		
N/A			N/A		N/A		
e ECN-2 Form, tion of the interim t 18, and identify	origina into the change include	issued. If the I design media e design media e the original d e the necessar	FCNs have no a then they are a via an ECN. lesign media tl y engineering	ot changed the e just incorporated If the FCN did hen the ECN will	Yes If Yes, as a page check	a minimum attach the one klist from TFC-ENG-	
Signatures		Date	2.	A/E Si	gnatures	Date	
M. H. Brown	6/ 	8-5-08	Originator/D	Design AgentJ	J Elsen Jalu	Usan 7/31/08	
Darol		425-08	Professional Engineer				
		· · · · · · · · · · · · · · · · · · ·	Project Engineer				
			Quality Ass	urance			
			Safety	····			
- 1 1	11.	-	Designer		XXXXXXXX		
AAII IN	wh :	8/5/08	Environ. En	nineer			
111.04.7							
Ganch Sol.		2/25/08	Other				
Gauck Sol.		8/25/08	Other		<u> </u>		
Gancingot.		8/25/08	Other				
Ganch Sol.		8/25/08	Other			VER PROTECTION	
Gauch Sot.		8/25/08	Other			VER PROTECTION Approval Signature	
	e approvals of the all dedication Numbers ot In HDCS) docum Document Numbers N/A N/A N/A N/A N/A N/A N/A Signatures M. H. Brayo	e approvals of the affected or dedication Numbers (associated to the Interior Number N/A	DM FM The a brief description of the contents of each approvals of the affected organizations as redication Numbers (associated with this location Numbers) The content Number of the interimation of the in	de a brief description of the contents of each revision) de approvals of the affected organizations as identified in ledication Numbers (associated with this change, e. None of In HDCS) documents that need to be modified due Document Number Update Co N/A N/A N/A N/A N/A N/A N/A N/A	DM	te a brief description of the contents of each revision) a approvals of the affected organizations as identified in block 12 "Approval Designator," on the dication Numbers (associated with this change, e.g., new drawings, new documents) None ot In HDCS) documents that need to be modified due to this change Document Number Update Completed On Responsible En N/A	

Other Other